NUCLEAR BLAST

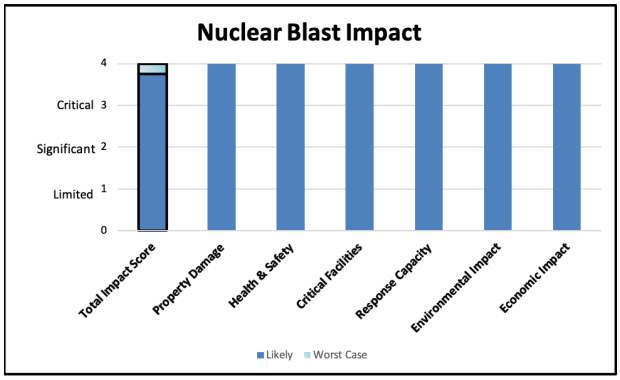
A Nuclear Blast is hazardous in many distinct ways. A Nuclear Blast results in a large fireball that vaporizes everything within the immediate blast area and carries it upward. Light and heat radiate outward from the explosion, and an electromagnetic pulse is emitted during the first few seconds of the blast. A blast wave generates overpressure and propagates rapidly out from the epicenter. Prompt radiation levels are high near the epicenter during the first minute of the explosion but decrease rapidly with time and distance. As the debris cloud cools, dust-like particles of radioactive material are dispersed by the wind and drop back to earth as fallout.

HAS IT HAPPENED LOCALLY?

There has never been a Nuclear Blast in Howard County (1945-2019).

WHAT IS THE ONGOING RISK?

There is an expected **0-1% Chance of Annual Occurrence** of a Nuclear Blast in Howard County. In the most likely Nuclear Blast scenario, the **Total Impact is considered Critical-Catastrophic**. In the worst-case scenario, the **Total Impact is considered Catastrophic**.



DID YOU KNOW?

- The electromagnetic pulse (EMP) emitted by a Nuclear Blast can easily span across several states.
- A large Nuclear Blast can cause/result in radioactive contamination that remains hazardous for up to 10 years.

FOR MORE INFORMATION:

- Howard County Hazard Identification and Risk Assessment
- U.S. Department of Health and Human Services
- Ready.gov
- Centers for Disease Control and Prevention

Nuclear Blast Risk Profile

	Risk Assessment Category	Likely Hazard Scenario	Worst-Case Hazard Scenario	Weight
LIKELIHOOD	Likelihood	1.25 Unlikely-Infrequent		50%
CONSEQUENCE	Impact	3.7 Critical-Catastrophic	4 Catastrophic	40%
	Warning Time	4 Short	4 Short	5%
	Duration	4 Very Long	4 Very Long	5%
TOTAL RISK SCORE		**2.5**	**2.6**